

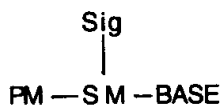
and **replace** with the following new title:

-- A SUGAR MOIETY LABELED NUCLEOTIDE, AND AN OLIGO- OR
POLYNUCLEOTIDE, AND OTHER COMPOSITIONS COMPRISING SUCH
SUGAR MOIETY LABELED NUCLEOTIDES --.

In The Claims:

Add new claims 272-305 as follows:

-- 272. (New) A nucleotide having the formula,



but 32
72
wherein PM is a phosphate moiety, SM is a ribose or a deoxyribose sugar moiety, and BASE is a pyrimidine, purine or 7-deazapurine moiety, said PM being attached to SM at a position independently selected from the 2', 3', and 5' positions of SM when said nucleotide is a ribonucleotide, and at a position independently selected from the 3' and 5' positions when said nucleotide is a deoxyribonucleotide, said BASE being attached to the 1' position of SM from the N¹ position when BASE is a pyrimidine or the N⁹ position when BASE is a purine or 7-deazapurine, and said Sig is a detectable moiety covalently attached to SM directly or through a linkage group. --

-- 273. (New) The nucleotide in accordance with claim 272 wherein Sig is attached to the C2' or the C3' position of SM. --

-- 274. (New) The nucleotide in accordance with claim 272 comprising a deoxyribonucleotide. --

-- 275. (New) The nucleotide in accordance with claim 272 comprising a ribonucleotide. --

-- 276. (New) The nucleotide in accordance with claim 272 wherein Sig comprises a moiety containing at least 3 carbon atoms. --

Enz-5(D5)(C2)

-- 277. (New) The nucleotide in accordance with claim 272 wherein Sig is selected from the group consisting of monosaccharides, oligosaccharides and polysaccharides. --

-- 278. (New) The nucleotide in accordance with claim 277 wherein Sig is selected from the group consisting of triose, tetrose, pentose, hexose, heptose and octose. --

-- 279. (New) The nucleotide in accordance with claim 272 wherein Sig includes a glycosidic linkage moiety. --

-- 280. (New) The nucleotide in accordance with claim 272 wherein Sig comprises a sugar residue and said sugar residue is complexed with a binding protein therefor. --

72

-- 281. (New) The nucleotide in accordance with claim 280 wherein said binding protein comprises a lectin. --

-- 282. (New) The nucleotide in accordance with claim 281 wherein said lectin comprises Concanavalin A. --

-- 283. (New) The nucleotide in accordance with claim 272 wherein Sig comprises a component selected from the group consisting of biotin, iminobiotin, an electron dense component, a magnetic component, an enzyme, a hormone component, a radioactive component, a metal-containing component, a fluorescent component, a chemiluminescent component, an antigen, a hapten and an antibody component. --

-- 284. (New) The nucleotide in accordance with claim 283 wherein said electron dense component comprises ferritin. --

-- 285. (New) The nucleotide in accordance with claim 281 wherein said lectin is conjugated to ferritin. --

-- 286. (New) The nucleotide in accordance with claim 282 wherein said Concanavalin A is conjugated to ferritin. --

-- 287. (New) The nucleotide in accordance with claim 283 wherein Sig comprises a radioactive isotope. --

-- 288. (New) The nucleotide in accordance with claim 287 wherein said radioactive isotope comprises radioactive cobalt. --

Enz-5(D5)(C2)

-- 289. (New) The nucleotide in accordance with claim 283 wherein Sig comprises an enzyme. --

-- 290. (New) The nucleotide in accordance with claim 289 wherein said enzyme is selected from the group consisting of alkaline phosphatase, acid phosphatase, β -galactosidase, ribonuclease, glucose oxidase and peroxidase. --

-- 291. (New) The nucleotide in accordance with claim 283 wherein Sig comprises a fluorescent component. --

-- 292. (New) The nucleotide in accordance with claim 291 wherein said fluorescent component is selected from the group consisting of fluorescein, rhodamine and dansyl. --

72
Sub
C1
-- 293. (New) The oligo- or polynucleotide in accordance with claim 283 wherein said Sig comprises a magnetic component. --

-- 294. (New) The oligo- or polynucleotide in accordance with claim 293 wherein said magnetic component comprises a magnetic oxide. --

-- 295. (New) The nucleotide in accordance with claim 294 wherein such magnetic oxide comprises ferric oxide. --

-- 296. (New) The nucleotide in accordance with claim 283 wherein Sig includes a hapten component capable of complexing with an antibody specific thereto. --

-- 297. (New) The nucleotide in accordance with claim 272 wherein Sig includes a catalytic metal-containing component. --

-- 298. (New) The nucleotide in accordance with claim 272 wherein said nucleotide is terminally ligated or attached to a polypeptide. --

-- 299. (New) A composition comprising at least one nucleotide in accordance with claim 272, a polypeptide capable of forming a complex with Sig, and a moiety which can be detected when such complex is formed. --

-- 300. (New) The composition in accordance with claim 299 wherein said polypeptide comprises a polylysine. --

Enz-5(D5)(C2)

-- 301. (New) The composition in accordance with claim 299 wherein said polypeptide comprises at least one member selected from the group consisting of avidin, streptavidin and anti-Sig immunoglobulin. --

-- 302. (New) The composition in accordance with claim 299 wherein Sig comprises a ligand and said polypeptide comprises an antibody thereto. --

72
-- 303. (New) The composition in accordance with claim 299 wherein said detectable moiety is selected from the group consisting of biotin, iminobiotin, an electron dense component, a magnetic component, an enzyme, a hormone component, a radioactive component, a metal-containing component, a fluorescent component, a chemiluminescent component, an antigen, a hapten and an antibody component. --

sub 5
-- 304. (New) The nucleotide in accordance with claim 274 wherein said Sig comprises a moiety which is detectable when said deoxyribonucleotide is incorporated with, contained in or associated with an oligo- or polynucleotide. --

-- 305. (New) The nucleotide in accordance with claim 275 wherein said Sig comprises a moiety which is detectable when said ribonucleotide is incorporated with, contained in or associated with an oligo- or polynucleotide. ---

In The Abstract of the Disclosure:

Delete the Abstract submitted with Applicants' September 11, 1995 Preliminary Amendment, and replace with the new substitute Abstract attached hereto Exhibit A.

* * * * *